



RAN - 2103000206020172

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T. Y. B. Sc. (Environmental Science) (Sem. - VI)

Examination April - 2023

Environmental Science - XVIII

Instrumentation Techniques In Environmental Analysis : Env. 602

Time: 2 Hours]

[Total Marks: 50

सूचना : / Instructions

(1) नीचे दृष्टविले निशानीवाणी विगतो उत्तरवही पर अवश्य लभवी.
Fill up strictly the details of signs on your answer book

Name of the Examination:
T. Y. B. Sc. (Environmental Science) (Sem. - VI)

Name of the Subject :
Environmental Science - XVIII Instrumentation Techniques In
Environmental Analysis : Env. 602

Subject Code No.: 2103000206020172

Seat No.:

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Student's Signature

- (2) Figures to the right indicate full marks of the question.
(3) Draw neat and labeled diagrams whenever necessary.

Q. 1. Give Specific Answers.

12

1. Which types of membranes are used in ion selective electrodes?
2. Explain the electrochemical cell.
3. Who invented pH scale? When?
4. Transmittance of a solution depends upon which factors?
5. Who invented chromatography and how?
6. Write down the functions of guard column used in HPLC.

Q. 2. Comment on/explain any two of the following:

12

1. Advantages and applications of AAS.
2. Explain about retention time during qualitative analysis and peak height, peak area during quantitative analysis in GC by drawing chromatogram.
3. Explain TCD and ECD used in GC with labelled diagram.

Q. 3. Comment on/explain any two of the following: 16

1. Draw schematic of flame photometer and explain about burners in detail.
2. Discuss about photo multiplier tube detector.
3. Distinguish clearly between GSC and GLC.

Q. 4. Write Short Notes (Any Two) 10

1. Glass electrode with labelled diagram.
 2. Applications of ion exchange chromatography.
 3. Refractive index detector used in HPLC.
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